

Mendocino NF Accomplishments - November 2016

Trout Creek Culvert Replacement - Upper Lake Ranger District



Trout Creek on the Upper Lake Ranger District is a small perennial stream which provides spawning and rearing habitat for resident trout, is generally shady with cool stream temperatures, and is visibly occupied by adult Foothill Yellow Legged frogs.

The Mendocino National Forest recently undertook a project to replace two 10-foot diameter culverts crossing Trout Creek at the M6 Road. These large culverts were installed in the early 1960s and were showing signs of extreme wear and tear. This represented a danger to water quality, downstream aquatic organisms (such as fish and frogs), road infrastructure, and public safety if the crossing failed. Furthermore, the culverts limited aquatic organism passage to varying degrees at various flow due to its long length.

The Forest started survey, design and regulatory compliance assurance work in 2014, with the contract being awarded in early 2016. Work on the ground began August and was completed by early November 2016.

The culverts were replaced with a single bottomless-arch culvert with concrete footings. Benefits to using a bottomless-arch culvert include having a natural stream bed. This helped to restore channel complexity and fish habitat that was absent due to the old culverts.

The features of this project are intended to benefit both public uses and ecosystem function.

Submitted by Hilda Kwan



Dual culvert system prior to construction, looking upstream



New construction completed, looking downstream



Cross-vane structures within bottomless culvert